

IN THE CLAIMS:

Please amend the claims as follows:

Claim 1 (Currently Amended): An information converting method of converting audio information, which comprises a plurality of partial-audio information based on a predetermined record standard in each of which output control information to control a state of the audio information at a time of outputting the audio information to an external portion is included, into transmission information to be transmitted through a data bus based on a predetermined transmission standard, said method comprising:

an extracting process of extracting the output control information from each of the partial-audio information;

a dividing process of dividing the audio information for a predetermined amount, which is set in advance so as to transmit the transmission information through the data bus, to thereby generate divided-audio information;

a generating process of adding the extracted output control information onto the generated divided-audio information to thereby generate an information unit for transmitting the audio information through said data bus; and

an outputting process of generating the transmission information by using a plurality of the generated information units and outputting the generated transmission information onto said data bus, wherein

the output control information comprises:

first output control information to be transmitted through said data bus, in response to the number of samplings preset in the audio information; and

second output control information to be transmitted through said data bus ~~only if it is~~ required, and

if a transmission of predetermined other information ~~the second output control information~~ is not required, said generating process generates the information unit comprising the divided-audio information, the first output control information and said predetermined other information in place of the second output control information.

Claim 2 (Canceled).

Claim 3 (Previously Presented): An information converting method according to Claim 1, wherein

the first output control information comprises mix control information to perform a channel mix process of the audio information at the time of outputting, and

the second output control information comprises frequency identification information indicative of a sampling frequency of the audio information.

Claim 4 (Previously Presented): An information converting method according to Claim 1, wherein

said generating process adds first identification information indicative of a content of the first output control information at a position to be transmitted prior to the first output control information within each of the information unit, and

said generating process adds second identification information indicative of a content of the second output control information at a position to be transmitted prior to the second output control information within each of the information unit.

Claim 5 (Original): An information converting method according to Claim 1, wherein the predetermined transmission standard is an IEEE (Institute of Electrical and Electronic Engineers) 1394 standard,

said data bus comprises a serial data bus through which the transmission information is transmitted in accordance with the IEEE 1394 standard, and

said information unit comprises one portion of an isochronous packet based on the IEEE 1394 standard.

Claim 6 (Original): An information converting method according to Claim 1, wherein the predetermined record standard is a DVD audio standard, the partial-audio information comprises an audio pack based on the DVD audio standard, and

the output control information comprises information in a private header based on the DVD audio standard.

Claim 7 (Currently Amended): An information converting apparatus for converting audio information, which comprises a plurality of partial-audio information based on a predetermined record standard in each of which output control information to control a state of the audio information at a time of outputting the audio information to an external portion is included, into transmission information to be transmitted through a data bus based on a predetermined transmission standard, said apparatus comprising:

an extracting device for extracting the output control information from each of the partial-audio information;

a dividing device for dividing the audio information for a predetermined amount, which is set in advance so as to transmit the transmission information through the data bus, to thereby generate divided-audio information;

a generating device for adding the extracted output control information onto the generated divided-audio information to thereby generate an information unit for transmitting the audio information through said data bus; and

an outputting device for generating the transmission information by using a plurality of the generated information units and outputting the generated transmission information onto said data bus, wherein

the output control information comprises:

first output control information to be transmitted through said data bus, in response to the number of samplings preset in the audio information; and

second output control information to be transmitted through said data bus ~~only if it is~~ required, and

if a transmission of predetermined other information ~~the second output control information~~ is not required, said generating device generates the information unit comprising the divided-audio information, the first output control information and said predetermined other information in place of the second output control information.

Claim 8 (Canceled).

Claim 9 (Previously Presented): An information converting apparatus according to Claim 7, wherein

the first output control information comprises mix control information to perform a channel mix process of the audio information at the time of outputting,
and

the second output control information comprises frequency identification information indicative of a sampling frequency of the audio information.

Claim 10 (Previously Presented): An information converting apparatus according to Claim 7, wherein

said generating device adds first identification information indicative of a content of the first output control information at a position to be transmitted prior to the first output control information within each of the information unit, and

said generating device adds second identification information indicative of a content of the second output control information at a position to be transmitted prior to the second output control information within each of the information unit.

Claim 11 (Original): An information converting apparatus according to Claim 7, wherein the predetermined transmission standard is an IEEE (Institute of Electrical and Electronic Engineers) 1394 standard,

said data bus comprises a serial data bus through which the transmission information is transmitted in accordance with the IEEE 1394 standard, and

said information unit comprises one portion of an isochronous packet based on the IEEE 1394 standard.

Claim 12 (Original): An information converting apparatus according to Claim 7, wherein the predetermined record standard is a DVD audio standard,
the partial-audio information comprises an audio pack based on the DVD audio standard,
and

the output control information comprises information in a private header based on the DVD audio standard.

Claim 13 (Currently Amended): An information reproducing apparatus comprising:
(i) an information converting apparatus for converting audio information, which comprises a plurality of partial-audio information based on a predetermined record standard in

each of which output control information to control a state of the audio information at a time of outputting the audio information to an external portion is included, into transmission information to be transmitted through a data bus based on a predetermined transmission standard, said information converting apparatus comprising:

an extracting device for extracting the output control information from each of the partial-audio information;

a dividing device for dividing the audio information for a predetermined amount, which is set in advance so as to transmit the transmission information through the data bus, to thereby generate divided-audio information;

a generating device for adding the extracted output control information onto the generated divided-audio information to thereby generate an information unit for transmitting the audio information through said data bus; and

an outputting device for generating the transmission information by using a plurality of the generated information units and outputting the generated transmission information onto said data bus,

wherein the output control information comprises:

first output control information to be transmitted through said data bus, in response to the number of samplings preset in the audio information; and

second output control information to be transmitted through said data bus ~~only if it is~~ required, and

if a transmission of predetermined other information ~~the second output control~~ information is ~~not~~ required, said generating device generates the information unit comprising the

divided-audio information, the first output control information and said predetermined other information in place of the second output control information; and

- (ii) a reproducing apparatus ~~device~~ for reproducing the audio information.

Claim 14 (Previously Presented): An information reproducing apparatus according to Claim 13, wherein

the first output control information comprises mix control information to perform a channel mix process of the audio information at the time of outputting, and

the second output control information comprises frequency identification information indicative of a sampling frequency of the audio information.

Claim 15 (Previously Presented): An information reproducing apparatus according to Claim 13, wherein

said generating device adds first identification information indicative of a content of the first output control information at a position to be transmitted prior to the first output control information within each of the information unit, and

said generating device adds second identification information indicative of a content of the second output control information at a position to be transmitted prior to the second output control information within each of the information unit.

Claim 16 (Previously Presented): An information reproducing apparatus according to Claim 13, wherein

the predetermined transmission standard is an IEEE (Institute of Electrical and Electronic Engineers) 1394 standard,

said data bus comprises a serial data bus through which the transmission information is transmitted in accordance with the IEEE 1394 standard, and

said information unit comprises one portion of an isochronous packet based on the IEEE 1394 standard.

Claim 17 (Previously Presented): An information reproducing apparatus according to Claim 13, wherein

the predetermined record standard is a DVD audio standard,

the partial-audio information comprises an audio pack based on the DVD audio standard, and

the output control information comprises information in a private header based on the DVD audio standard.

Claim 18 (New): An information converting method according to Claim 1, wherein the second output control information and the predetermined other information have address information indicating that succeeding information is the second output control information or the predetermined other information.

Claim 19 (New): An information converting method according to Claim 1, wherein the information unit is one sampling unit and comprises the divided-audio information, the first output control information and the second output control information, wherein the divided-audio information comprising audio information divided by each channel.

Claim 20 (New): An information converting apparatus according to Claim 7, wherein the second output control information and the predetermined other information have address information indicating that succeeding information is the second output control information or the predetermined other information.

Claim 21 (New): An information converting apparatus according to Claim 7, wherein the information unit is one sampling unit and comprises the divided-audio information, the first output control information and the second output control information, wherein the divided-audio information comprising audio information divided by each channel.

Claim 22 (New): An information reproducing apparatus comprising an inputting device for inputting transmission information comprising a plurality of information units through a data bus based on a predetermined transmission standard, each of the information units comprising audio information and output control information to control a state of the audio information at a time of outputting the audio information, the output control

information comprising first output control information in response to the number of samplings preset in the audio information, wherein each of the information units further comprises any one of second output control information and predetermined other information in place of the second output control information, the predetermined other information being transmitted if it is required,

a reproducing device for reproducing the audio information based on the output control information.

Claim 23 (New): An information reproducing apparatus according to Claim 22, wherein the second output control information and the predetermined other information have address information indicating that succeeding information is the second output control information or the predetermined other information.

Claim 24 (New): An information reproducing apparatus according to Claim 22, wherein the information unit is one sampling unit and comprises the audio information, the first output control information and the second output control information,

wherein the audio information is divided by each channel.

Claim 25 (New): An information reproducing apparatus according to Claim 24, wherein the reproducing device reproduces the audio information based on the first output control information and the second output control information.

Claim 26 (New): An information reproducing apparatus according to Claim 23, wherein the reproducing device determines whether the succeeding information is the second output control information or the predetermined other information based on the address information, and reproduces the audio information based on the first output control information and the second output control information if the succeeding information is the second output control information.